Applicant: Hara, et al. Attorney's Docket No.: 13781-002001 / PH-1074US

Serial No.: 09/699,133 Filed: October 27, 2000

Page : 3 of 8

## IN THE CLAIMS:

Please cancel claims 11, 13, 23 and 26 without prejudice. Please amend the claims as set forth below. This listing of claims replaces all prior versions and listings of claims in the application:

## **Listing of Claims**

- 1-5. (Canceled)
- 6. (Currently Amended) A method for forming a structure having multiple cell layers comprising:
- (a) forming a cell layer on a carrier, wherein the carrier comprises a porous membrane and an alginate gel layer which is formed on the porous membrane, wherein the cell layer is on the alginate layer, or on an extracellular matrix component gel layer or an extracellular matrix component sponge layer which is formed on the alginate gel layer;
- (b) solubilizing the alginate gel layer of the carrier thereby exfoliating the cell layer from the porous membrane of the carrier; and
- (c) placing the exfoliated cell layer on another cell layer formed on the same or another  $\underline{a}$  carrier.
  - 7. (Canceled)
- 8. (Previously Presented) The method of claim 6, wherein the alginate gel layer is composed of a calcium alginate gel.

Applicant: Hara, et al. Attorney's Docket No.: 13781-002001 / PH-1074US

Serial No.: 09/699,133 Filed: October 27, 2000

Page : 4 of 8

9. (Currently Amended) The method of claim 6, wherein the earrier further comprises an cell layer is on the extracellular matrix component gel layer or extracellular matrix component (ECM) sponge layer which is formed on the alginate gel layer.

10. (Currently Amended) The method of claim 6, wherein the extracellular matrix component gel or sponge layer comprises a collagen.

## 11. (Canceled)

12. (Previously Presented) The method of claim 6, wherein the porous membrane comprises a filter, an ultrafiltration membrane, a silicone rubber membrane, a polytetrafluoroethylene resin porous membrane, a nonwoven fabric or a gauze-like mesh.

## 13. (Canceled)

- 14. (Currently Amended) The method of elaim 13 claim 6, wherein the membrane has pores that are between about 0.02 to 1000 μm.
- 15. (Currently Amended) The method of claim 9, wherein the extracellular matrix component gel or sponge layer comprises a collagen, an elastin, a proteoglycan, a glucosaminoglycan, a fibronectin, a laminin, a vitronectin or a heparan sulfate.
- 16. (Previously Presented) The method of claim 9, wherein the extracellular matrix component comprises a gel comprising collagen type IV, laminin and heparan sulfate.
- 17. (Previously Presented) The method of claim 6, wherein the thickness of the porous membrane is between about 0.01 to 1 mm, 0.01 to 0.1 mm, or 0.05 to 1 mm.

Attorney's Docket No.: 13781-002001 / PH-1074US

Applicant: Hara, et al.
Serial No.: 09/699,133
Filed: October 27, 2000

Page : 5 of 8

18. (Previously Presented) The method of claim 6, wherein the thickness of the alginate gel layer is between about 0.1 to 3 mm or between about 1 to 2 mm.

- 19. (Previously Presented) The method of claim 9, wherein the thickness of the extracellular matrix component gel layer is between about 0.1 to 1 mm or between about 0.2 to 0.5 mm.
- 20. (Previously Presented) The method of claim 9, wherein the thickness of the extracellular matrix component sponge layer is between about 0.1 to 2 mm or between about 0.2 to 1 mm.
- 21. (Previously Presented) The method of claim 6, wherein the cell is a fibroblast, a vascular endothelial cell, a chondrocyte, a hepatocyte, a small intestine epitheliocyte, an epidermis cornification cell, an osteoblast, a bone marrow mesenchymal cell or a fibroblast.
- 22. (Currently Amended) The method of claim 6, wherein when forming the cell layer a cell concentration of between about 10,000 to 15,000 cells/ml is added onto the alginate gel layer or the extracellular matrix component gel layer or extracellular matrix component sponge layer.
  - 23. (Canceled)
- 24. (Previously Presented) The method of claim 22, wherein solubilization of the alginate gel layer is carried out by use of a chelating agent.
- 25. (Currently Amended) The method of claim 23 claim 24, wherein the chelating agent comprises a polyaminocarboxylic acid, an ethylenediaminetetraacetic acid, an ethylene glycolbis(β-aminoethyl ether), an oxycarboxylic acids, or a citric acid.

Applicant: Hara, et al. Attorney's Docket No.: 13781-002001 / PH-1074US

Serial No.: 09/699,133 Filed: October 27, 2000

Page : 6 of 8

26-28. (Canceled)

29. (Previously Presented) The method of claim 18, wherein the thickness of the alginate gel layer is about 1 mm.

- 30. (Previously Presented) The method of claim 19, wherein the thickness of the extracellular matrix component gel layer is about 0.4 mm.
- 31. (Previously Presented) The method of claim 20, wherein the thickness of the extracellular matrix component sponge layer is about 0.5 mm.